

## **SECTION 708**

## DAMPPROOFING

**708.1 Description.** This work shall consist of the application of dampproofing material below the ground line on those portions of substructure units or walls designated in the contract. Dampproofing will be classified as Ordinary Dampproofing or as Special Dampproofing.

## 708.2 Material.

**708.2.1** All material shall conform to Division 1000, Materials Details, and specifically as follows:

Item	Section
Dampproofing and Waterproofing Material	1072

## 708.3 Construction Requirements.

**708.3.1** Dampproofing shall not be applied in wet weather nor when the ambient temperature is below 50 F (10 C). Concrete shall be dry and clean before dampproofing is applied. If bituminous material is used for curing, it may also serve as a priming coat, except that additional primer may be necessary before application of the top coat. The bitumen for dampproof mop coat shall be carefully heated to a temperature within the following limits:

Asphalt	300 - 350 F (150 - 175 C)
Coal-Tar Pitch	200 - 250 F (90 - 120 C)

The bitumen shall be heated in kettles equipped with armored thermometers, and stirred frequently.

**708.3.2 Ordinary Dampproofing.** Ordinary dampproofing shall be applied by covering the surfaces either with (1) a light priming coat of asphaltic primer and an asphalt mop coat or (2) with a creosote priming coat and a coal-tar pitch mop coat. The application of primer shall be allowed to cure properly before applying the mop coat. The primer shall be applied without heating at the approximate rate of one gallon per 100 square feet (0.4 L/m²) of surface with a three or four knot roofing brush. If asphalt primer is too thick to allow easy brushing, the material may be thinned by the addition of a small quantity of gasoline or naphtha. After the primer has cured, the mop coat shall be applied at the rate of approximately 50 pounds per 100 square feet (2.5 kg/m²) of surface to obtain a thickness of approximately 5/64 inch (2.0 mm) for the dampproof coating.

**708.3.3 Special Dampproofing.** If special dampproofing at joints is specified, it shall consist of applying a coat of primer as specified in Sec 708.3.2. After the primer has cured, a 50-pound  $(2.5 \text{ kg/m}^2)$  mop coat shall be applied as specified in Sec 708.3.2. While this mop coat is still hot, there shall be applied a strip of bituminous treated cotton fabric which shall extend at least 6 inches (150 mm) each side of construction and expansion joints. A second mop coat shall then be applied at the rate of 30 pounds per 100 square feet  $(1.5 \text{ kg/m}^2)$  to obtain a thickness of approximately 3/64 inch (1.2 mm), and while still hot another strip of bituminous

treated cotton fabric shall be applied, extending 3 inches (75 mm) beyond the edges of the first layer of fabric. The entire surface of the fabric shall be given a final 50-pound (2.5 kg/m) mop coat. On surfaces that are vertical or nearly so, the strips of cotton fabric shall be placed vertical or with the slope. On other surfaces, the strips shall be laid shingle fashion, beginning at the lowest part of the area to be dampproofed. All fabric shall be pressed into place in the hot bitumen to eliminate air bubbles and to bring it into close contact with the concrete surface.

**708.3.4** Patching of defective dampproofing, where necessary, shall extend at least 12 inches (300 mm) beyond the outermost edge of the defective portion. The second ply of the patch shall extend at least 3 inches (75 mm) beyond the first ply.

**708.3.5** Work shall be so regulated that at the end of the day all fabric that has been applied will have received the final coat of bitumen.

708.4 Basis of Payment. No direct payment will be made for dampproofing.